

# **KY Valid Course List**

## HOW TO USE THIS DOCUMENT

This document contains a listing of course descriptions and parameters along with certifications that fit the parameters for a given course. The grade range and population information listed for each course are not absolute. Please choose the course that most closely represents the students in a given course.

### EXAMPLE

John Q Middle School had 5<sup>th</sup>, 6<sup>th</sup>, and 7<sup>th</sup> grade students taking a Creative Art course. This course would be linked to course number **500711: Creative Art – Comprehensive**, which shows with a recommended grade range of 6<sup>th</sup> – 12<sup>th</sup>.

The courses listed in this document are not meant to replace the course titles and course numbers already in use at the school level. Schools will link their courses in the STI Valid Course List to courses listed in this document.

Schools may have created courses that are very unique in order to meet students' needs. If a course does not meet the definition or content of one contained in this document, please use course number **909999: School Defined Course**, and code the correct content through the LEAD report.

## CERTIFICATIONS

It is important to note that the certificates listed are the ones that fit *ALL* of the parameters for a specific course – there may be other certificates that can teach it with slightly more restrictive parameters.

It is very important to note that not all of the certificates listed under a specific course will meet the Highly Qualified Teacher standards as defined by The No Child Left Behind Act of 2001. Please refer to the Highly Qualified guidance documents located on the Education Professional Standards Board (EPSB) website at <http://www.kyepsb.net/nclb.asp>.

In addition to Highly Qualified considerations, please take note of the following information from ***The Program of Studies for Kentucky Schools Primary-12*** with regard to middle school courses that are offered for high school credit.

### High School Credit Earned in Middle School

It is expected that most students will earn these credits during their high school years. However, local school districts may offer these courses to middle level students if the following criteria are met:

- the content and the rigor of the course is the same as established in the *Program of Studies*
- the students demonstrate mastery of the middle level content as specified in the *Program of Studies*
- the district has criteria in place to make reasonable determination that the middle level student is capable of success in the high school course
- **the middle level course is taught by teachers with either secondary or middle level certification with appropriate content specialization**

Although middle level courses list the Provisional and Standard Elementary Certificates, Grades 1-8 as allowable under the parameters of these courses, they will not meet the above requirements for courses that are offered for high school credit.

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Please contact Robin Chandler in KDE's Division of Curriculum at 502-564-2106 with any questions on content and curricula.

Please contact EPSB's Division of Certification at 502-564-4606 with any questions on credentials or permissions.

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# Mathematics

## (270000)

# Mathematics - Middle (270200)

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## 270201 - Sixth Grade Mathematics

**Grade Level:** 6 - 6

**Credits:**

**Description:** This course is designed so the student accomplishes all the 6th Grade Mathematics Program of Studies.

**Content:** Middle School Mathematics (general)

**Population:** General

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## 270202 - Seventh Grade Mathematics

**Grade Level:** 7 - 7

**Credits:**

**Description:** This course is designed so the student accomplishes all the 7th Grade Mathematics Program of Studies.

**Content:** Middle School Mathematics (general)

**Population:** General

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## 270203 - Eighth Grade Mathematics

**Grade Level:** 8 - 8

**Credits:**

**Description:** This course is designed so the student accomplishes all the 8th Grade Mathematics Program of Studies.

**Content:** Middle School Mathematics (general)

**Population:** General

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## 270204 - Accelerated Sixth Grade Mathematics

**Grade Level:** 6 - 6

**Credits:**

**Description:** This course is designed so the student accomplishes all the 6th Grade Mathematics Program of Studies, while providing opportunities for extensions appropriate for accelerated students.

**Content:** Middle School Mathematics (general)

**Population:** General

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## 270205 - Accelerated Seventh Grade Mathematics

**Grade Level:** 7 - 7

**Credits:**

**Description:** This course is designed so the student accomplishes all the 7th Grade Mathematics Program of Studies, while providing opportunities for extensions appropriate for accelerated students.

**Content:** Middle School Mathematics (general)

**Population:** General

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## 270206 - Accelerated Eighth Grade Mathematics

**Grade Level:** 8 - 8

**Credits:**

**Description:** This course is designed so the student accomplishes all the 8th Grade Mathematics Program of Studies, while providing opportunities for extensions appropriate for accelerated students.

**Content:** Middle School Mathematics (general)

**Population:** General

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## 270211 - Integrated Mathematics (NSF-6th Grade)

**Grade Level:** 6 - 6

**Credits:**

**Description:** This course is based on one of the middle grades integrated curricula, which were developed through NSF-funded projects. Connected Mathematics, MathThematics, Math in Context, Math Trailblazers, Math Scape.

**Content:** Middle School Mathematics (general)

**Population:** General

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## 270212 - Integrated Mathematics (NSF-7th Grade)

**Grade Level:** 7 - 7

**Credits:**

**Description:** This course is based on one of the middle grades integrated curricula, which were developed through NSF-funded projects. Connected Mathematics, MathThematics, Math in Context, Math Trailblazers, Math Scape.

**Content:** Middle School Mathematics (general)

**Population:** General

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## 270213 - Integrated Mathematics (NSF-8th Grade)

**Grade Level:** 8 - 8

**Credits:**

**Description:** This course is based on one of the middle grades integrated curricula, which were developed through NSF-funded projects. Connected Mathematics, MathThematics, Math in Context, Math Trailblazers, Math Scape.

**Content:** Middle School Mathematics (general)

**Population:** General

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## 270214 - Integrated Mathematics (non-NSF - 6th Grade)

**Grade Level:** 6 - 6

**Credits:**

**Description:** This course would be based on an integrated curricula other than one of the NSF-developed curricula mentioned in 270211, 270212, or 270213.

**Content:** Middle School Mathematics (general)

**Population:** General

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## 270215 - Integrated Mathematics (non-NSF - 7th Grade)

**Grade Level:** 7 - 7

**Credits:**

**Description:** This course would be based on an integrated curricula other than one of the NSF-developed curricula mentioned in 270211, 270212, or 270213.

**Content:** Middle School Mathematics (general)

**Population:** General

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## 270216 - Integrated Mathematics (non-NSF - 8th Grade)

**Grade Level:** 8 - 8

**Credits:**

**Description:** This course would be based on an integrated curricula other than one of the NSF-developed curricula mentioned in 270211, 270212, or 270213.

**Content:** Middle School Mathematics (general)

**Population:** General

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## 270222 - Pre-Algebra (Grades 6-8)

**Grade Level:** 6 - 8

**Credits:**

**Description:** This course prepares middle school students to be successful in an Algebra 1 course based on the relevant statements from the High School Program of Studies. PLEASE NOTE: It is to be used for 6th through 8th grades only. Not available for high school credit.

**Content:** Pre-Algebra

**Population:** General

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## 270231 - Algebra 1 (7th Grade - HS credit)

**Grade Level:** 7 - 7

**Credits:** 1

**Description:** This course addresses all the relevant statements from the High School Program of Studies for a high school Algebra I course and builds on those further in order to qualify for high school graduation credit.

**Content:** Algebra I

**Population:** General

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## 270232 - Algebra 1 (8th Grade - HS credit)

**Grade Level:** 8 - 8

**Credits:** 1

**Description:** This course addresses all the relevant statements from the High School Program of Studies for a high school Algebra I course and builds on those further in order to qualify for high school graduation credit.

**Content:** Algebra I

**Population:** General

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## 270233 - Geometry (8th Grade - HS credit)

**Grade Level:** 8 - 8

**Credits:** 1

**Description:** This course addresses all the relevant statements from the High School Program of Studies for a high school Geometry course and builds on those further in order to qualify for high school graduation credit.

**Content:** Geometry

**Population:** General

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## 270241 - Algebra 1 (7th Grade - non-HS credit)

**Grade Level:** 7 - 7

**Credits:**

**Description:** This course addresses all the relevant statements from the High School Program of Studies for a high school Algebra I course but would not be intended for high school graduation credit.

**Content:** Algebra I

**Population:** General

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## 270242 - Algebra 1 (8th Grade - non-HS credit)

**Grade Level:** 8 - 8

**Credits:**

**Description:** This course addresses all the relevant statements from the High School Program of Studies for a high school Algebra I course but would not be intended for high school graduation credit.

**Content:** Algebra I

**Population:** General

---

## 270243 - Geometry (8th Grade - non-HS credit)

**Grade Level:** 8 - 8

**Credits:**

**Description:** This course addresses all the relevant statements from the High School Program of Studies for a high school Geometry course but would not be intended for high school graduation credit.

**Content:** Geometry

**Population:** General



# Mathematics - Algebra (270300)

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## 270301 - Pre-Algebra

**Grade Level:** 9 - 10

**Credits:** 1E

**Description:** This course assists students who lack a sufficient background to be successful in a high school graduation credit Algebra 1 course to develop the skills and concepts necessary to be successful for high school credit Algebra 1. This course could serve as credit for high school graduation.

**Content:** Pre-Algebra

**Population:** General

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## 270302 - Algebra 1 (Part 1)/Algebra 1 (Part A)/ Algebra 0.5

**Grade Level:** 9 - 10

**Credits:** 1/1E

**Description:** This course is designed for students who might need two years (or two semesters in block schedules) to attain all the concepts addressed in the relevant statements from the High School Program of Studies for a high school Algebra I course. One course could count as an elective for high school graduation credit, but students would need to complete both courses (Part 1 and Part 2) to earn the Algebra 1 credit for high school graduation.

**Content:** Algebra I

**Population:** General

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## 270303 - Algebra 1 (Part 2)/Algebra 1 (Part B)

**Grade Level:** 9 - 10

**Credits:** 1/1E

**Description:** This course is designed for students who might need two years (or two semesters in block schedules) to attain all the concepts addressed in the relevant statements from the High School Program of Studies for a high school Algebra I course. Students would need to complete both courses (Part 1 and Part 2) to earn the Algebra 1 credit for high school graduation.

**Content:** Algebra I

**Population:** General

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## 270304 - Algebra 1

**Grade Level:** 9 - 11

**Credits:** 1

**Description:** This course is designed so the students attain all the concepts contained in the relevant statements in the High School Program of Studies for a high school Algebra I course and to build on those in order to earn the high school graduation credit for Algebra I.

**Content:** Algebra I

**Population:** General

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## 270305 - Honors Algebra 1

**Grade Level:** 9 - 9

**Credits:** 1

**Description:** This course is designed so the students attain all the concepts contained in the relevant statements in the High School Mathematics Program of Studies for a high school Algebra I course and to build on those in order to earn the high school graduation credit for Algebra I, with the opportunity provided extensions.

**Content:** Algebra I

**Population:** General

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## 270306 - Accelerated Algebra 1

**Grade Level:** 9 - 9

**Credits:** 1

**Description:** This course is designed so the students attain all the concepts contained in the relevant statements in the High School Mathematics Program of Studies for a high school Algebra I course and to build on those in order to earn the high school graduation credit for Algebra I, with extensions and acceleration provided for students who qualify.

**Content:** Algebra I

**Population:** General

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## 270307 - MST Algebra 1

**Grade Level:** 9 - 9

**Credits:** 1

**Description:** This course is designed so students could attain all the concepts contained in the relevant statements in the High School Mathematics Program of Studies for a high school Algebra I course and to build on those in order to earn the high school graduation credit for Algebra I, with extensions and applications provided for students who are enrolled in mathematics/science/technology magnet programs.

**Content:** Algebra I

**Population:** General

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## 270308 - Algebra 1 Lab (Mathematics Strategies)

**Grade Level:** 9 - 11

**Credits:** 1E

**Description:** This course is designed for students who need additional time with Algebra 1 topics and runs concurrently with Algebra 1. This course uses hands-on activities and experiments with graphing calculators to experiment with graphing calculators to support the study of the concepts addressed in the relevant statements in the High School Mathematics Program of Studies for a high school Algebra 1 course. This course could serve as an elective for high school graduation, but not as a mathematics credit for high school graduation.

**Content:** Algebra I

**Population:** General

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## 270310 - Algebra 1.5/Introduction to Algebra 2/ Algebra 2, Part A

**Grade Level:** 10 - 12

**Credits:** 1E

**Description:** This course is designed for those students who have completed their Algebra 1 graduation credit, but are not deemed sufficiently prepared to attempt a rigorous, college-preparatory Algebra 2 course. The intent of this course is to go beyond Algebra 1 and prepare students for the Algebra 2 course.

**Content:** Algebra II  
**Population:** General

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## 270311 - Algebra 2

**Grade Level:** 9 - 12

**Credits:** 1

**Description:** This course is designed so the students develop the relevant skills and concepts from the High School Mathematics Program of Studies beyond Algebra 1 and then builds on those skills and concepts in a rigorous manner.

**Content:** Algebra II

**Population:** General

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## 270312 - Honors Algebra 2

**Grade Level:** 9 - 12

**Credits:** 1

**Description:** This course is designed so the students develop the relevant skills and concepts from the High School Mathematics Program of Studies beyond the Algebra 1 and Geometry courses and then builds on those in a rigorous, college-preparatory Algebra 2, with opportunities provided for students to progress ahead of the minimal statements from the High School Mathematics Program of Studies.

**Content:** Algebra II

**Population:** General

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## 270313 - Accelerated Algebra 2

**Grade Level:** 9 - 12

**Credits:** 1

**Description:** This course is designed so the students develop the relevant skills and concepts from the High School Mathematics Program of Studies beyond the Algebra 1 and Geometry courses and then builds on those in a rigorous, college-preparatory Algebra 2, with opportunities provided for students to progress ahead of the minimal statements from the High School Mathematics Program of Studies, with extensions and acceleration provided for students who qualify.

**Content:** Algebra II

**Population:** General

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## 270314 - MST Algebra 2

**Grade Level:** 9 - 11

**Credits:** 1

**Description:** This course is designed so the students could develop the relevant skills and concepts from the High School Mathematics Program of Studies and then build on those in a rigorous, college-preparatory Algebra 2, with opportunities provided for students to progress ahead of the minimal statements from the High School Mathematics Program of Studies, with extensions and applications provided for students who are enrolled in mathematics/science/technology magnet programs.

**Content:** Algebra II

**Population:** General

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## 270315 - Technical Algebra 2

**Grade Level:** 9 - 12

**Credits:** 1/1E

**Description:** This course is designed so the students can develop the relevant skills and concepts from the High School Mathematics Program of Studies with an intentional focus on hands-on activities which relate to

real world applications of the concepts in Algebra 2.

**Content:** Algebra II

**Population:** General

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## 270318 - Algebra 2 Lab

**Grade Level:** 9 - 12

**Credits:** 1E

**Description:** This course is designed for students who need additional time with Algebra 2 topics and runs concurrently with Algebra 2. This course uses hands-on activities and experiments with graphing calculators to support the study of the concepts addressed in the relevant statements in the High School Mathematics Program of Studies beyond Algebra 1 and Geometry courses. This course could serve as an elective for high school graduation credit, but not as a mathematics credit for high school graduation.

**Content:** Algebra II

**Population:** General

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## 270321 - Algebra 3/Preparation for College Algebra

**Grade Level:** 11 - 12

**Credits:** 1E

**Description:** This course is designed for students who are intending to attend college and are in need of additional preparation in order to be successful in credit-bearing College Algebra, or for students who feel in need of additional preparation to take a college Calculus course. The content goes beyond a traditional Algebra 2 course.

**Content:** Advanced Topics in Mathematics

**Population:** General

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## 270322 - Algebra with Trigonometry

**Grade Level:** 11 - 12

**Credits:** 1E

**Description:** This course code is reserved for an Algebra 2 class designed so that students could develop the relevant skills and concepts from the High School Mathematics Program of Studies and then build on those in a rigorous, college-preparatory Algebra 2, with opportunities provided for students to progress ahead of the minimal statements from the High School Mathematics Program of Studies, with an additional emphasis on the concepts of trigonometry. This course could also serve as the basis of preparation for a college calculus course.

**Content:** Pre-Calculus

**Population:** General

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## 270323 - Accelerated Algebra with Trigonometry

**Grade Level:** 11 - 12

**Credits:** 1E

**Description:** This course code is reserved for an Algebra 2 class designed so students develop the relevant skills and concepts from the High School Mathematics Program of Studies and then builds on those in a rigorous, college-preparatory Algebra 2, with opportunities provided for students to progress ahead of the minimal statements from the High School Mathematics Program of Studies, with an additional emphasis on the concepts of trigonometry. This course could also serve as the basis of preparation for a college Calculus course, with extensions and acceleration provided for students who qualify.

**Content:** Pre-Calculus

**Population:** General

# Mathematics - Geometry (270400)

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## 270401 - Geometry

**Grade Level:** 9 - 12

**Credits:** 1

**Description:** This course is designed so the students can develop skills and concepts from the relevant statements in the High School Program of Studies in order to earn the high school graduation credit for Geometry.

**Content:** Geometry

**Population:** General

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## 270402 - Honors Geometry

**Grade Level:** 9 - 12

**Credits:** 1

**Description:** This course is designed so the students can develop skills and concepts from the relevant statements in the High School Program of Studies in order to earn the high school graduation credit for Geometry, with opportunity provided for students to progress ahead of the minimal requirements from the Program of Studies.

**Content:** Geometry

**Population:** General

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## 270403 - Accelerated Geometry

**Grade Level:** 9 - 11

**Credits:** 1

**Description:** This course is designed so the students can develop skills and concepts from the relevant statements in the High School Program of Studies in order to earn the high school graduation credit for Geometry, with extensions and acceleration provided for students.

**Content:** Geometry

**Population:** General

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## 270404 - MST Geometry

**Grade Level:** 9 - 11

**Credits:** 1

**Description:** This course is designed so the students can develop skills and concepts from the relevant statements in the High School Program of Studies in order to earn the high school graduation credit for Geometry, with extensions and applications provided for students who are enrolled in mathematics/science/technology magnet programs.

**Content:** Geometry

**Population:** General

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## 270406 - Geometry Lab

**Grade Level:** 9 - 12

**Credits:** 1E

**Description:** This course is designed for students who need additional time with Geometry topics and runs concurrently with Geometry. This course uses hands-on activities and experiments with graphing calculators to support the study of the concepts addressed in the relevant statements in the High School Mathematics Program of Studies beyond the Algebra 1 courses. This course could serve as an elective for high school graduation credit, but not as a mathematics credit for high school graduation.

**Content:** Geometry

**Population:** General

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## 270411 - Construction Technology/Geometry

**Grade Level:** 9 - 12

**Credits:** 1

**Description:** This course is designed as the high school Geometry graduation credit earned by a student who completed two of three constructional technology career/technical education courses -- Site Layout and Foundations, Floor and Wall Framing, or Ceiling and Roof Framing with all the high school Geometry content build into the courses.

**Content:** Construction Technology/Geometry for Geometry Requirement

**Population:** General

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## 270412 - Computer-Aided Drafting/Geometry

**Grade Level:** 9 - 12

**Credits:** 1

**Description:** This course is designed as the high school Geometry graduation credit earned by a student who completes the two introductory Computer-Assisted Design career/technical education courses.

**Content:** Computer Aided Drafting for Geometry Requirement

**Population:** General

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## 270421 - Integrated Technical Geometry 1

**Grade Level:** 9 - 12

**Credits:** 1/1E

**Description:** This course is designed so the students develop the skills and concepts from the relevant statements in the High School Mathematics Program of Studies for a high school Geometry course in order to earn the high school graduation credit for Geometry, with applications from other courses applied as well, and emphasizing hands-on activities which relate to real world applications of Geometry. This course and 270422 would both have to be completed to earn the high school graduation requirement credit for geometry.

**Content:** Geometry

**Population:** General

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## 270422 - Integrated Technical Geometry 2

**Grade Level:** 9 - 12

**Credits:** 1/1E

**Description:** This course is designed so the students develop the skills and concepts from the relevant statements in the High School Mathematics Program of Studies for a high school Geometry course in order to earn the high school graduation credit for Geometry, with applications from other courses applied as well, and emphasizing hands-on activities which relate to real world applications of Geometry. This course and 270421 would both have to be completed to earn the high school graduation requirement credit for geometry.

**Content:** Geometry

**Population:** General

# Mathematics - Calculus (270500)

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## 270501 - Pre-Calculus

**Grade Level:** 10 - 12

**Credits:** 1E

**Description:** This course is designed for students to attain the concepts necessary to be successful in a Calculus course, an AP Calculus course or a College Calculus course.

**Content:** Pre-Calculus

**Population:** General

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## 270502 - Honors Pre-Calculus

**Grade Level:** 10 - 12

**Credits:** 1E

**Description:** This course is designed for students to attain the concepts necessary to be successful in a Calculus course, an AP Calculus course or a College Calculus course, with the opportunity provided for students to progress ahead of the minimal requirements for such courses.

**Content:** Pre-Calculus

**Population:** General

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## 270503 - Accelerated Pre-Calculus

**Grade Level:** 10 - 12

**Credits:** 1E

**Description:** This course is designed for students to attain the concepts necessary to be successful in a Calculus course, an AP Calculus course or a College Calculus course, with extensions and acceleration provided for students who qualify.

**Content:** Pre-Calculus

**Population:** General

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## 270504 - MST Pre-Calculus

**Grade Level:** 10 - 12

**Credits:** 1E

**Description:** This course is designed for students to attain the concepts necessary to be successful in a Calculus course, an AP Calculus course or a College Calculus course, with extensions and applications provided for students who are enrolled in mathematics/science/technology magnet programs.

**Content:** Pre-Calculus

**Population:** General

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## 270505 - IB Pre-Calculus

**Grade Level:** 10 - 12

**Credits:** 1E

**Description:** This course is designed to address all the curriculum for Pre-Calculus as described in the International Baccalaureate guidelines.

**Content:** Pre-Calculus

**Population:** General

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## 270511 - Calculus

**Grade Level:** 11 - 12

**Credits:** 1E

**Description:** This course is designed to address all the concepts normally covered in differential and integral calculus.

**Content:** Calculus

**Population:** General

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## 270512 - IB Calculus

**Grade Level:** 11 - 12

**Credits:** 1E

**Description:** This course is designed to address all the curriculum for Calculus as described in the International Baccalaureate guidelines.

**Content:** Calculus

**Population:** General

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## 270513 - AP Calculus AB

**Grade Level:** 11 - 12

**Credits:** 1E

**Description:** This course is designed to address all the concepts delineated in the College Board guidelines for the AB Calculus examination.

**Content:** AP Calculus

**Population:** General

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## 270514 - AP Calculus BC

**Grade Level:** 11 - 12

**Credits:** 1E

**Description:** This course is designed to address all the concepts delineated in the College Board guidelines for the BC Calculus examination.

**Content:** AP Calculus

**Population:** General



# Mathematics - Other Mathematical Topics (270600)

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## 270601 - Data and Measurement

**Grade Level:** 9 - 12

**Credits:** 1E

**Description:** This course is designed as an extension of high school Mathematics courses, and is intended for students who desire to have their mathematics skills strengthened before continuing in their study of mathematics. It includes the Data and Measurement sections of the Program of Studies required for graduation.

**Content:** Extended Topics In Algebra (Data and Measurement)

**Population:** General

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## 270602 - Probability and Statistics

**Grade Level:** 9 - 12

**Credits:** 1E

**Description:** This course is designed to address such concepts as theoretical and experimental probability, binomial distributions, normal distributions, displaying and describing distributions of data, collecting data, measures of central tendency and dispersion, and methods of inferential statistics.

**Content:** Probability/Statistics

**Population:** General

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## 270603 - Accelerated Probability and Statistics

**Grade Level:** 9 - 12

**Credits:** 1E

**Description:** This course is designed to address such concepts as theoretical and experimental probability, binomial distributions, normal distributions, displaying and describing distributions of data, collecting data, measures of central tendency and dispersion, and methods of inferential statistics, with extensions and acceleration provided for students who qualify.

**Content:** Probability/Statistics

**Population:** General

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## 270604 - AP Statistics

**Grade Level:** 11 - 12

**Credits:** 1E

**Description:** This course is designed to address the guidelines provided by the College Board for the Advanced Placement Statistics examination.

**Content:** AP Statistics

**Population:** General

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## 270611 - Discrete Mathematics

**Grade Level:** 10 - 12

**Credits:** 1E

**Description:** This course is designed for advanced high school mathematics students who are interested in a future in business or computer applications, addressing such topics as set theory, mathematical induction, graph theory, permutations and combinations, and other topics as deemed appropriate.

**Content:** Finite/Discrete Mathematics

**Population:** General

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## 270612 - Finite Mathematics

**Grade Level:** 10 - 12

**Credits:** 1E

**Description:** This course is designed for students who have completed high school mathematics courses through Algebra 2, and addresses such topics as linear systems using matrices, linear inequalities, data analysis, graph theory, probability, and finance applications.

**Content:** Finite/Discrete Mathematics

**Population:** General

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## 270613 - Honors Finite Mathematics

**Grade Level:** 10 - 12

**Credits:** 1E

**Description:** This course is designed in a similar manner to 270612, with the addition of such topics as linear programming and the simplex method, probability distributions, and logic.

**Content:** Finite/Discrete Mathematics

**Population:** General

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## 270621 - Advanced Topics in Mathematics

**Grade Level:** 10 - 12

**Credits:** 1E

**Description:** This course is designed to allow students to pursue topics in mathematics beyond the scope of the Program of Studies and may cover topics from combined higher level courses or topics which are not found in other higher level courses.

**Content:** Advanced Topics in Mathematics

**Population:** General

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## 270631 - Trigonometry

**Grade Level:** 10 - 12

**Credits:** 1E

**Description:** This course is designed for students who have completed Algebra 2 and want to proceed further into aspects of Trigonometry.

**Content:** Trigonometry

**Population:** General

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## 270641 - Mathematics for Business and Industry

**Grade Level:** 9 - 12

**Credits:** 1E

**Description:** This course is designed as an interdisciplinary course that would be offered through the business strand of the career/technical education program. This course employs high school mathematics content with business emphasis.

**Content:** Math for Business and Industry for the Math Elective Requirement

**Population:** General

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## 270651 - Independent Study

**Grade Level:** 9 - 12

**Credits:** 1E

**Description:** This course is designed to provide an opportunity for the student to make an in-depth study on a topic related to mathematics. The student has the responsibility and freedom to research, analyze, evaluate, and present conclusions in written and/or oral form. Students would apply and be accepted for independent study in a manner determined by the local district.

**Content:** General Mathematics

**Population:** General

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## 270661 - Mathematics Concepts

**Grade Level:** 9 - 12

**Credits:**

**Description:** This course is designed to be taken after completion of Algebra 1 and Geometry. Topics include probability and statistics, extension of algebra and geometry concepts, and discrete mathematics.

**Content:** Advanced Topics in Mathematics

**Population:** General

# Mathematics - Integrated Mathematics (270700)

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## 270701 - Integrated Mathematics 1 (NSF-curricula)

**Grade Level:** 9 - 10

**Credits:** 1

**Description:** This course is the first year of the Integrated Mathematics curricula developed through the support of the National Science Foundation. These NSF-supported curricula are: Contemporary Mathematics in Context (Core-Plus Mathematics Project); Interactive Mathematics Program; MATH Connections: A Secondary Mathematics Core Curriculum; Mathematics: Modeling Our World (ARISE); SIMMS Integrated Mathematics: A Modeling Approach Using Technology.

**Content:** Integrated Mathematics 1

**Population:** General

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## 270702 - Integrated Mathematics 2 (NSF-curricula)

**Grade Level:** 10 - 11

**Credits:** 1

**Description:** This course is the second year of the Integrated Mathematics curricula developed through the support of the National Science Foundation. These NSF-supported curricula are: Contemporary Mathematics in Context (Core-Plus Mathematics Project); Interactive Mathematics Program; MATH Connections: A Secondary Mathematics Core Curriculum; Mathematics: Modeling Our World (ARISE); SIMMS Integrated Mathematics: A Modeling Approach Using Technology.

**Content:** Integrated Mathematics 2

**Population:** General

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## 270703 - Integrated Mathematics 3 (NSF-curricula)

**Grade Level:** 10 - 12

**Credits:** 1E

**Description:** This course is the third year of the Integrated Mathematics curricula developed through the support of the National Science Foundation. These NSF-supported curricula are: Contemporary Mathematics in Context (Core-Plus Mathematics Project); Interactive Mathematics Program; MATH Connections: A Secondary Mathematics Core Curriculum; Mathematics: Modeling Our World (ARISE); SIMMS Integrated Mathematics: A Modeling Approach Using Technology.

**Content:** Integrated Mathematics 3

**Population:** General

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## 270704 - Integrated Mathematics 4 (NSF-curricula)

**Grade Level:** 11 - 12

**Credits:** 1E

**Description:** This course is the fourth year of the Integrated Mathematics curricula developed through the support of the National Science Foundation. These NSF-supported curricula are: Contemporary Mathematics in Context (Core-Plus Mathematics Project); Interactive Mathematics Program; MATH Connections: A Secondary Mathematics Core Curriculum; Mathematics: Modeling Our World (ARISE); SIMMS Integrated Mathematics: A Modeling Approach Using Technology.

**Content:** Integrated Mathematics 4

**Population:** General

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## 270711 - Integrated Mathematics 1 (non-NSF-curricula)

**Grade Level:** 9 - 10

**Credits:** 1

**Description:** This course is the first year of an integrated curricula that was not developed through the support of the National Science Foundation. These sequences of integrated curricula need to include the Program of Studies Mathematics content for graduation within the integrated courses taken by each student.

**Content:** Integrated Mathematics 1

**Population:** General

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## 270712 - Integrated Mathematics 2 (non-NSF-curricula)

**Grade Level:** 10 - 11

**Credits:** 1

**Description:** This course is the second year of an integrated curricula that was not developed through the support of the National Science Foundation. These sequences of integrated curricula need to include the Program of Studies Mathematics content for graduation within the integrated courses taken by each student.

**Content:** Integrated Mathematics 2

**Population:** General

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## 270713 - Integrated Mathematics 3 (non-NSF-curricula)

**Grade Level:** 10 - 12

**Credits:** 1E

**Description:** This course is the third year of an integrated curricula that was not developed through the support of the National Science Foundation. These sequences of integrated curricula need to include the Program of Studies Mathematics content for graduation within the integrated courses taken by each student.

**Content:** Integrated Mathematics 3

**Population:** General

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## 270714 - Integrated Mathematics 4 (non-NSF-curricula)

**Grade Level:** 10 - 12

**Credits:** 1E

**Description:** This course is the fourth year of an integrated curricula that was not developed through the support of the National Science Foundation. These sequences of integrated curricula need to include the Program of Studies Mathematics content for graduation within the integrated courses taken by each student.

**Content:** Integrated Mathematics 4

**Population:** General

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## 270715 - High School Mathematics 1

**Grade Level:** 9 - 10

**Credits:** 1

**Description:** This course is the first high school course for students who need additional time and support to complete the High School Mathematics Program of Studies for graduation requirements. It would address all of the statements from the High School Mathematics Program of Studies, with a strong emphasis on real world connections and connections with other disciplines of study.

**Content:** General Mathematics

**Population:** General

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## 270716 - High School Mathematics 2

**Grade Level:** 9 - 11

**Credits:** 1

**Description:** This course is the second high school course for students who need additional time and support to complete the High School Mathematics Program of Studies for graduation requirements. It would address all of the statements from the High School Mathematics Program of Studies, with a strong emphasis on real world connections and connections with other disciplines of study.

**Content:** General Mathematics

**Population:** General

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## 270717 - High School Mathematics 3

**Grade Level:** 10 - 12

**Credits:** 1E

**Description:** This course is the third high school course for students who need additional time and support to complete the High School Mathematics Program of Studies for graduation requirements. It would address all of the statements from the High School Mathematics Program of Studies, with a strong emphasis on real world connections and connections with other disciplines of study.

**Content:** General Mathematics

**Population:** General

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## 270718 - High School Mathematics 4

**Grade Level:** 11 - 12

**Credits:** 1/1E

**Description:** This course is the fourth high school course for students who need additional time and support to complete the high school mathematics Program of Studies for graduation requirements. It addresses all of the statements from the High School Mathematics Program of Studies, with a strong emphasis on real world connections and/or connections with other disciplines of study.

**Content:** General Mathematics

**Population:** General

# Mathematics - Applied Mathematics (270800)

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## 270801 - Applied Mathematics 1

**Grade Level:** 9 - 10

**Credits:** 1

**Description:** This course is the first year of a series of courses that would be designed to address all the statements in the High School Mathematics Program of Studies over the course of the four years. The course will also emphasize real world applications of the mathematics that are addressed in the Program of Studies. Students will need to complete the series to complete graduation requirements and the Program of Studies for Mathematics.

**Content:** Applied Mathematics

**Population:** General

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## 270802 - Applied Mathematics 2

**Grade Level:** 9 - 11

**Credits:** 1

**Description:** This course is the second year of a series of courses that would be designed to address all the statements in the High School Mathematics Program of Studies over the course of the four years. The course will also emphasize real world applications of the mathematics that are addressed in the Program of Studies. Students will need to complete the series to complete graduation requirements and the Program of Studies for Mathematics.

**Content:** Applied Mathematics

**Population:** General

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## 270803 - Applied Mathematics 3

**Grade Level:** 10 - 12

**Credits:** 1E

**Description:** This course is the third year of a series of courses that would be designed to address all the statements in the High School Mathematics Program of Studies over the course of the four years. The course will also emphasize real world applications of the mathematics that are addressed in the Program of Studies. Students will need to complete the series to complete graduation requirements and the Program of Studies for Mathematics.

**Content:** Applied Mathematics

**Population:** General

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## 270804 - Applied Mathematics 4

**Grade Level:** 11 - 12

**Credits:** 1E

**Description:** This course is the fourth year of a series of courses that would be designed to address all the statements in the High School Mathematics Program of Studies over the course of the four years. The course will also emphasize real world applications of the mathematics that are addressed in the Program of Studies. Students will need to complete the series to complete graduation requirements and the Program of Studies for Mathematics.

**Content:** Applied Mathematics

**Population:** General